AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A method for removing recoverable waste products and non-recoverable waste products, comprising feeding recoverable waste products and non-recoverable waste products into one end of a substantially horizontally fixed container as material, continuously or discontinuously transporting the material to another end of the container, supplying a controlled amount of an oxygen-containing gas to the container, 60 - 80% of energy input being carried out on the material in an area of a first quarter of the container based upon the one end of the container into which the material is fed, and a remaining 20 - 40% of energy input being transferred to the material in other areas of the container, discharging an entire exhaust gas-solids mixture from the container, and subsequently subjecting the exhaust gases and the solids to an energy recovery process.

2. (Previously Presented) The method according to claim 1, wherein the materials fed to the container comprise a residual moisture of 10%.

3. (Previously Presented) The method according to claim 1, wherein the material is transported continuously at a speed of 18 m/h to a discharge opening.

4. (Previously Presented) The method according to claim 1, wherein an energy input on the material of 70% is carried out in the first quarter of the container.

5. (Previously Presented) The method according to claim 1, wherein each further quarter of the container subsequent to the first quarter includes an energy input of 10%.

6. (Previously Presented) The method according to claim 1, wherein energy input in the first quarter is carried out by a burner.

7. (Previously Presented) The method according to claim 1, wherein the energy input in the other areas of the container is carried out by heated air.

8. (Previously Presented) The method according to claim 1, wherein the energy input is carried out at least in the first quarter directly on the material.

9. (Previously Presented) The method according to claim 1, wherein a maximum temperature of 600 -700 °C is implemented in the container to start the process.

10. (Previously Presented) The method according to claim 1, wherein the discharged exhaust gas-solids mixture is fed into a device for cracking long-chain hydrocarbons after the container.

11. (Previously Presented) The method according to claim 1, wherein after being discharged from the container the exhaust gas-solids mixture or after cracking of long-chain hydrocarbons in a further process, the exhaust gas-solids mixture is conveyed to a device for gasification of energy components.

12. (Previously Presented) The method according to claim 11, wherein the gasification is carried out with hypostoichiometric air supply.

13. (Previously Presented) The method according to claim 11, wherein the gasification is regulated via a partial combustion process.

14. (Previously Presented) The method according to claim 11, wherein steam is added to the gasification process.

15. (Currently Amended) An apparatus for removing recoverable waste products and non-recoverable waste products, comprising a tubular container with a feed opening for recoverable and non-recoverable waste products as material on one end, a discharge opening for the exhaust gas-solids mixture on another end, a shaft arranged centrally through the container, devices positioned on said shaft, an oxygen-containing gas supply to introduce a controlled supply of oxygen-containing gas into the container, and at least one of a device for cracking hydrocarbons and a device for gasification of solids from the container positioned after the discharge opening of the container.

16. (Previously Presented) The apparatus according to claim 15, wherein the tubular container is composed of sheet metal in a double-walled construction.

17. (Previously Presented) The apparatus according to claim 15, wherein the feed opening is arranged as a stuffing screw with a gate valve in an upper front area of the container.

18. (Previously Presented) The apparatus according to claim 15, wherein a burner is arranged in a lower front area of the container.

19. (Previously Presented) The apparatus according to claim 15, wherein the shaft is tubular.

20. (Previously Presented) The apparatus according to claim 15, wherein the devices positioned on the shaft comprise devices to transport the material.

21. (Previously Presented) The apparatus according to claim 20, wherein the devices positioned on the shaft are paddles.

22. (Previously Presented) The apparatus according to claim 20, wherein the paddles comprise pitched surfaces.

23. (Previously Presented) The apparatus according to claim 15, wherein the devices positioned on the shaft are attached to the shaft with keyed joints.

24. (Previously Presented) The apparatus according to claim 15, wherein the shaft is located outside the container.

25. (Previously Presented) The apparatus according to claim 15, wherein grates to collect the material are arranged over an entire length of the container in a lower area.

26. (Previously Presented) The apparatus according to claim 15, wherein a blade-like device is arranged at the discharge opening of the container for discharging the exhaust gas-solids mixture.

27. (Previously Presented) The apparatus according to claim 15, wherein a device for cracking long-chain hydrocarbons and a device for the gasification of the exhaust gas-solids mixture are positioned after the container.

28. (Previously Presented) The apparatus according to claim 27, wherein the device for cracking long-chain hydrocarbons and the device for the gasification of the exhaust gas-solids mixture comprise one device.

29. (Previously Presented) The apparatus according to claim 15, wherein the tubular container comprises an ignition source in an area of the discharge opening.

30. (Previously Presented) The apparatus according to claim 29, wherein the ignition source is a burner with an open flame or a spiral-wound filament.

31. (Previously Presented) The apparatus according to claim 15, wherein the tubular container comprises a pressure release opening in an upper part in an area of the discharge opening.

32. (Previously Presented) The apparatus according to claim 31, wherein the pressure release opening is a flap or a weighted safety valve.